

FRAMATOME ANP

Steam generator that includes a feedwater delivery  
device for trapping foreign bodies

ABSTRACT

The steam generator includes a feedwater delivery device at an upper axial end of an annular space between an outer shell and a bundle wrapper of the steam generator. The feedwater delivery device includes a header (11) having a shell of toroidal general shape, at least one feed pipe for the header and feedwater distribution means (14) in the upper part of the annular space of the steam generator. The feedwater distribution means (14) include a plurality of openings (17) that pass through the upper part of the shell of the toroidal header (11) and are distributed circumferentially on the wall of the header and a plurality of tubes (15) fixed via a lower end part at an opening (17) of the header (11). Each of the straight tubes (15) includes an upper end part through which openings (20), such as water passage slots, pass and a cap (16) fixed to the upper end of the tube (15) surrounding, with a radial clearance, the upper end part of the tube (15). In this way, the feedwater is properly distributed and foreign bodies possibly contained in the feedwater are trapped.

Figure 4A.